Google Cloud

Lab - Connecting to a Secure Backend

Wherein ...

- We modify our APIEatery Proxy to point to a different back end, and
- Find out we are required to Authenticate to the new back end, and
- Provide sufficient credentials to exercise access

Modify the backend target

- In the Target Endpoint | HttpConnection change from:
  http://baas-ug000sr.apigee.net/apigee-training/sandbox/ratings
- to:
  <URL>https://apigee-edu-prod.apigee.net/v1/apieatery</URL>

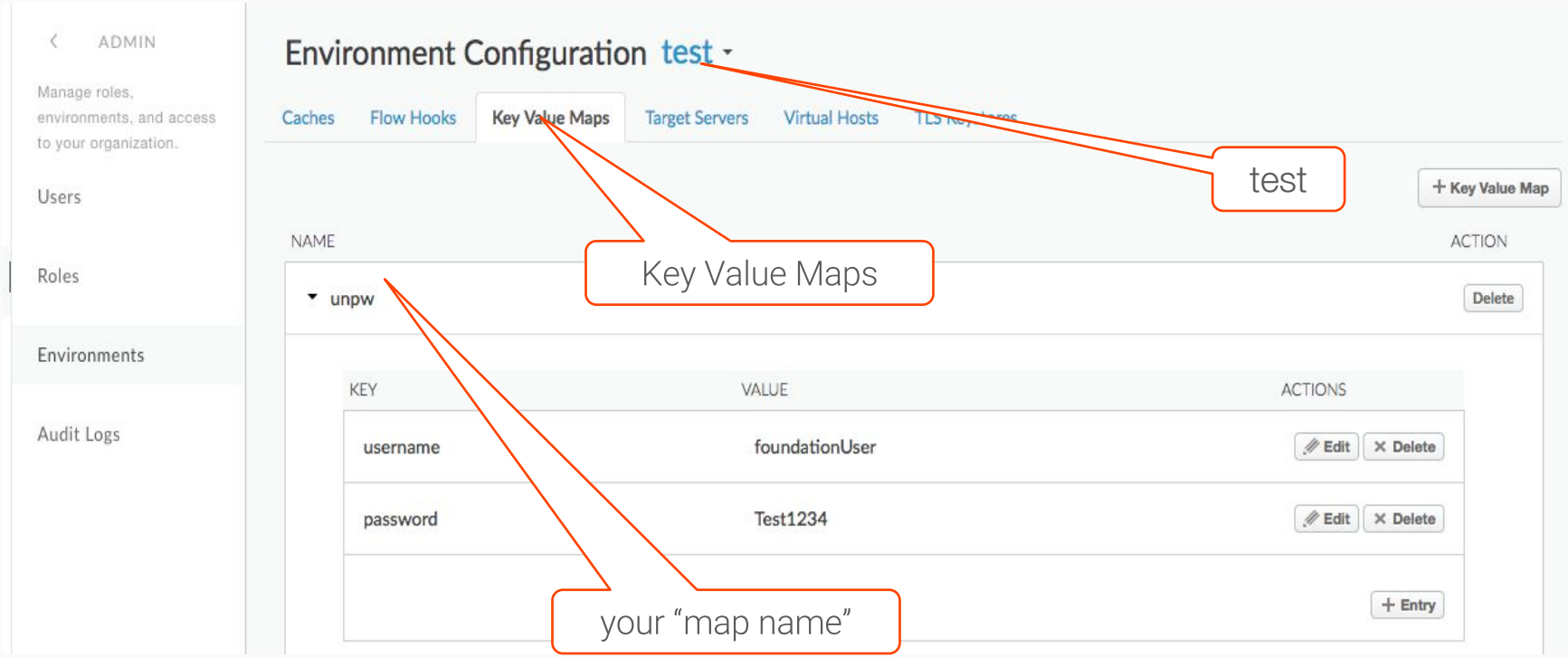
- Test again with the /chefs resource to:
  http://<your-orgname>-test.apigee.net/v1/apieatery-<yr-intls>/chefs

  – You should get a "401" Error. Why?

Modify proxy to connect to a Basic Authenticated backend

- **Step One:** Create KVM
- **Step Two:** Access KVM
- **Step Three:** Build Authorization Header
- **Step Four:** Test your code

Create a Key Value Map

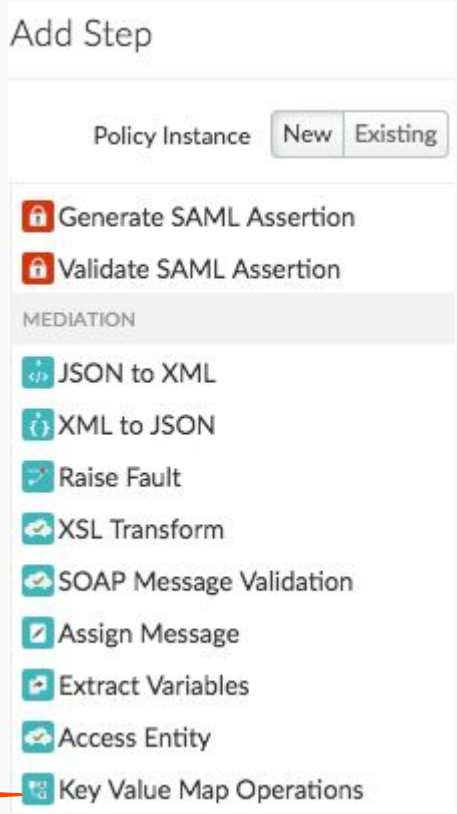


Click on +Key Value Map, Expand then click on +Entry.
Add 2 entries “username”, “password”

KVM Policy Configuration Options

- In Target Preflow - Click on Add Step [+]" button; Find KeyValueMap Operations policy in list

```
<?xml version="1.0" encoding="UTF-8" standalone="yes"?>
<KeyValueMapOperations async="false" mapIdentifier="unpw"
continueOnError="false" enabled="true"
name="Key-Value-Map-Operations-1">
   <DisplayName>Key Value Map Operations-1</DisplayName>
   <Properties/>
   <ExclusiveCache>false</ExclusiveCache>
   <ExpiryTimeInSecs>300</ExpiryTimeInSecs>
   <Get assignTo="username" index="1">
      <Key><Parameter>username</Parameter></Key>
   </Get>
   <Get assignTo="password" index="1">
      <Key><Parameter>password</Parameter></Key>
   </Get>
   <Scope>environment</Scope>
</KeyValueMapOperations>
```



KVM Policy

KVM Policy Configuration Options

- **ExpiryTimeInSecs** - This setting is used to expire the cache not the entry
- **InitialEntries** - Allows you to pre-define values
    - We prebuilt our initial entries
- **Multiple Values** - KVM supports multiple values per name, you can access values using the index attribute of the Get tag

Create Basic Authentication Policy

- In Target Preflow - Click on Add Step [+]" button; Find Basic Authentication policy in list
  - Can Encode two variables into a basic Authorization header
  - Can Decode a basic Authorization header into two variables

```
<?xml version="1.0" encoding="UTF-8" standalone="yes"?>
<BasicAuthentication async="false" continueOnError="false"
enabled="true" name="Basic-Authentication-1">
    <DisplayName>Basic Authentication-1</DisplayName>
    <Operation>Encode</Operation>
    <IgnoreUnresolvedVariables>false</IgnoreUnresolvedVariables>
    <User ref="username"/>
    <Password ref="password"/>
    <AssignTo
createNew="true">request.header.Authorization</AssignTo>
    <Source>request.header.Authorization</Source>
</BasicAuthentication>
```

Basic Auth Policy

Test your proxy

- Test again with the /chefs resource to:
  http://<your-orgname>-test.apigee.net/v1/apieatery-<yr-intls>/chefs

THANK YOU